Elk Stream Ranch Weed Plan

1. Noxious Weed Identification
    a. Class A Weeds: none identified within Elk Stream Ranch
    b. Class B Weeds: Musk Thistle, Bull Thistle, Canada Thistle, Jointed Goat Grass, Yellow Toad Flax and Russian Knapweed
    c. Class C Weeds: Common Mullein, Downy Brome (Cheatgrass), Chicory and Common Burdock
    d. Other: Houndstongue, Gamble Oak
2. Inventory and Mapping – see maps for marked locations of the most prevalent weed species
    a. Musk Thistle, Bull Thistle and Scotch Thistle – throughout Elk Stream Ranch
    b. Canada Thistle – water drainage areas and Lot 17 on G.3 (brought in by livestock)
    c. Jointed Goat Grass – throughout open areas from Lot 24 – Lot 35 (brought in by wildlife, livestock and vehicles)
    d. Yellow Toad Flax – Lot 30 (came in with flower seeds)
    e. Russian Knapweed – along edge of County Road 46 (brought in with loads of gravel)
    f. Common Mullein – throughout Elk Stream Ranch (brought in by birds, gravel and consequence of fire)
    g. Downy Brome (Cheatgrass) – along all roadways and some open meadows (brought in by livestock, wildlife and gravel)
    h. Chicory – water drainage areas (brought in by water)
    i. Common Burdock – located along County Road 46 (brought in by livestock and wildlife)
    j. Houndstongue – throughout oak brush areas (brought in by wildlife and flower seeds)
    k. Gamble Oak – throughout Elk Stream Ranch
3. Implementation and Management
    a. 4 Styles of Effective Weed Management
        i. Mechanical Control - brush mowing, mechanical removal of targeted weeds
            1. Brush Mowing – works well for early stages of Musk Thistle, Bull Thistle and Scotch Thistle; creates partial control for invasive grasses
            2. Mechanical Removal (digging up and disposing of targeted weeds) – creates partial control for Canada Thistle and Russian Knapweed; full control on Musk Thistle, Bull Thistle, Scotch Thistle and Mustards
        ii. Biological Control (natural enemies) – planting competitive grass species (native grasses), insects that aid in controlling targeted weed species
            1. Insects to control Musk Thistle, Russian Knapweed and Yellow Toad Flax
            2. Spores to control Canada Thistle
        iii. Chemical Control – Herbicide Application
            1. Timing
                a. May – All thistle species, Common Mullein, Yellow Toad Flax, Houndstongue, Chicory and Common Burdock
                b. June/July/August – All the weeds from May plus Russian Knapweed
                c. September/October – All previous months' weed species plus Jointed Goat Grass, Gamble Oak and Downy Brome
            2. Effective Herbicides for Targeted Weed Species

        a. May/June/July/August species – Milestone, Transline, Telar, Escort, Tordon, Trump Card, 2, 4-D
        b. September/October species – Lambient, Olympus, Plateau, Milestone, Garlon 4 Ultra
    iv. Cultural Control – Grazing
        1. Grazing provides partial control on invasive grasses; promotes growth of native grasses; helps control grasshoppers and reduces fire danger.
4. Potential Future Problems
    a. Soil Disturbances
    b. Introduction of new weed species through livestock and seed packages
    c. Limited native grass revegetation
    d. Introduction of weeds by foreign materials (i.e. – gravel, topsoil, etc.)
5. Promoting a Healthy Ecosystem
    a. Balanced weed program
    b. Effective reseeding program
    c. Erosion control
    d. Well managed animal grazing program (i.e. – cross fencing, rotational grazing, etc.)